



**City of Nashua  
Wastewater Fund  
Rate/Revenue Requirements Analysis  
April 2013**

## **Wastewater Fund: Rate/Revenue Requirements Analysis**

### **Page 3 – Schedule A – Analysis of Operations**

Schedule A is the Analysis of Operations for the Wastewater Fund for the period FY2013 through FY2019.  
Included in the analysis is:

- 1) Percentage increases projected in Retail User Fees.
- 2) Projected Revenues and Expenditures from operational activities resulting in the calculation of Net Surplus from Operations for each year.
- 3) Projected Capital Project Costs offset by Grants and Contributions, Funding from the Capital Equipment Reserve and Debt proceeds resulting in Net Surplus or Deficit from Capital Projects Funding for each year.
- 4) Projected Total Unrestricted Net Assets in the Fund - Unrestricted Retained Earnings and Capital Equipment Reserve.
- 5) Recommended Unrestricted Net Assets Target – this calculation includes 2 months of operating expenses and one-half of the annual debt service using a three year average.

### **Page 4 – Schedule B - Analysis of Capital Projects – Capital Expenditures**

Schedule B is the Analysis of Capital Projects for the Wastewater Fund.  
Included in the analysis is:

- 1) A listing of the various Consent Decree Control Plan Projects, Collections System and Other Wastewater Projects, and Hazard and Stormwater Control Projects.
- 2) For each project, the schedule shows the total project amount, the amount of the project financed by cash, the amount of the project financed by debt and the estimated spending plan for the years FY2013 to FY2019.

### **Page 5 - Schedule C – Analysis of Capital Projects – Capital Funding Sources**

Schedule C is the Analysis of Capital Funding Sources for the Wastewater Fund.  
Included in the analysis is:

- 1) A listing of Grants and Contributions and the amounts anticipated to be received for the years FY2013 to FY2019.
- 2) Use of funds from the Capital Equipment Reserve for each year.

- 3) A listing of the Projects funded by debt along with the anticipated debt proceeds for each year.

**Page 6 - Schedule D – Capital Replacement Schedule**

This table lists all plant and mobile equipment and includes year acquired, original cost, life, year of replacement, future value (projected value at year of replacement), and amount to reserve each year in order to reach that future value (with inflation and investment earnings factored in). This equipment is categorized by plant and collections.

**Page 16 - Schedule E – New Project Debt**

This table shows the debt schedules for each of the projects being debt financed.

**Page 19 - Schedule F – Old Project Debt**

This table shows the old debt service payments required for each year.

City of Nashua  
Analysis of Operations  
FY2013 through FY2019

Schedule A

Line No.	Description	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1	Projected Percent Increase in Retail User Fees	0.00%	15.00%	10.00%	10.00%	10.00%	5.00%	5.00%
2								
3	<u>Revenue</u>							
4	Retail User Fee Revenue	\$ 9,391,585	\$ 10,800,323	\$ 11,880,355	\$ 13,068,391	\$ 14,375,230	\$ 15,093,991	\$ 15,848,691
5	Wholesale Revenue	557,652	570,214	583,112	596,354	609,952	623,914	638,940
6	Subtotal - User Fee Revenues	\$ 9,949,237	\$ 11,370,537	\$ 12,463,467	\$ 13,664,745	\$ 14,985,181	\$ 15,717,905	\$ 16,487,631
7	Other Revenue	654,415	571,958	564,371	561,141	556,897	555,221	559,006
8	Total Revenues	\$ 10,603,652	\$ 11,942,496	\$ 13,027,838	\$ 14,225,886	\$ 15,542,078	\$ 16,273,126	\$ 17,046,638
9								
10	<u>Expenditures</u>							
11	<u>Operating Expenditures</u>							
12	Personnel Related Expenditures	\$ 3,324,158	\$ 3,423,883	\$ 3,526,599	\$ 3,632,397	\$ 3,741,369	\$ 3,853,610	\$ 3,969,218
13	Plant Operations and Maintenance	2,894,656	2,991,446	3,091,637	3,195,356	3,302,736	3,413,912	3,529,029
14	Administration Costs (Non Personnel)	284,438	292,971	301,760	310,813	320,137	329,741	339,634
15	Subtotal - Operating Expenditures	\$ 6,503,252	\$ 6,708,300	\$ 6,919,996	\$ 7,138,566	\$ 7,364,242	\$ 7,597,264	\$ 7,837,881
16								
17	<u>Non-Operating Expenditures</u>							
18	Capital Outlay	\$ 1,790,288	\$ 1,797,614	\$ 1,805,234	\$ 1,813,158	\$ 1,821,399	\$ 1,829,970	\$ 1,838,884
19	Debt Service Payments	2,307,389	3,456,068	3,381,962	5,012,877	4,906,733	4,800,589	4,694,446
20	Subtotal - Non-Operating Expenditures	\$ 4,097,677	\$ 5,253,683	\$ 5,187,196	\$ 6,826,035	\$ 6,728,132	\$ 6,630,559	\$ 6,533,329
21								
22	Total Expenditures	\$ 10,600,929	\$ 11,961,982	\$ 12,107,192	\$ 13,964,601	\$ 14,092,374	\$ 14,227,822	\$ 14,371,210
23								
24	Net Surplus From Operations	\$ 2,723	-\$ 19,487	\$ 920,646	\$ 261,285	\$ 1,449,704	\$ 2,045,304	\$ 2,675,427
25								
26	<u>Capital Projects Funding</u>							
27	Debt Proceeds (Schedule C)	\$ 14,018,711	\$ 12,543,145	\$ 13,458,643	\$ -	\$ -	\$ -	\$ -
28	Grants and Contributions (Schedule C)	277,443	528,664	450,631	132,540	127,533	122,526	122,526
29	Funding from Capital Equipment Reserve (Schedule C)	2,278,000	1,628,000	2,558,000	556,000	1,132,000	532,000	853,000
30	Less: Capital Project Costs (Schedule B)	(16,324,976)	(16,307,124)	(17,214,566)	(2,982,646)	(3,653,723)	(3,153,365)	(3,578,797)
31	Net Surplus (Deficit) From Capital Projects	\$ 249,178	\$ (1,607,315)	\$ (747,292)	\$ (2,294,106)	\$ (2,394,190)	\$ (2,498,839)	\$ (2,603,271)
32								
33								
34	<u>Unrestricted Retained Earnings</u>							
35	Beginning Balance	\$ (4,709,990)	\$ (4,458,089)	\$ (6,084,891)	\$ (5,911,537)	\$ (7,944,357)	\$ (8,888,842)	\$ (9,342,378)
36	Net Surplus (Deficit) From Operations (Line 24 above)	2,723	(19,487)	920,646	261,285	1,449,704	2,045,304	2,675,427
37	Net Surplus (Deficit) From Capital Projects (Line 31 above)	249,178	(1,607,315)	(747,292)	(2,294,106)	(2,394,190)	(2,498,839)	(2,603,271)
38	Ending Balance	\$ (4,458,089)	\$ (6,084,891)	\$ (5,911,537)	\$ (7,944,357)	\$ (8,888,842)	\$ (9,342,378)	\$ (9,270,222)
39								
40	<u>Capital Equipment Reserve</u>							
41	Beginning Balance	\$ 9,754,881	\$ 9,045,794	\$ 9,024,923	\$ 8,074,052	\$ 9,125,181	\$ 9,600,310	\$ 10,675,439
42	Capital Equipment Additions Funded by Sewer Rates (Schedule D)	1,568,913	1,607,129	1,607,129	1,607,129	1,607,129	1,607,129	1,607,129
43	Payments for Capital Equipment Expenditures (Schedule D)	(2,278,000)	(1,628,000)	(2,558,000)	(556,000)	(1,132,000)	(532,000)	(853,000)
44	Ending Balance	\$ 9,045,794	\$ 9,024,923	\$ 8,074,052	\$ 9,125,181	\$ 9,600,310	\$ 10,675,439	\$ 11,429,568
45								
46	Total Unrestricted Net Assets	\$ 4,587,706	\$ 2,940,033	\$ 2,162,516	\$ 1,180,824	\$ 711,468	\$ 1,333,061	\$ 2,159,346
47								
48	<u>Recommended Unrestricted Net Assets Target</u>							
49	Working Capital (Based on 2 Months of Operating Expenses)	\$ 1,083,875	\$ 1,118,050	\$ 1,153,333	\$ 1,189,761	\$ 1,227,374	\$ 1,266,211	\$ 1,306,313
50	Bonded Debt (1/2 year of Debt Service from 3yr avg)	\$ 1,524,237	\$ 1,975,151	\$ 2,216,929	\$ 2,453,366	\$ 2,400,295	\$ 2,340,175	\$ 2,203,177
51	Recommended Reserve Target	\$ 2,608,112	\$ 3,093,201	\$ 3,370,261	\$ 3,643,127	\$ 3,627,668	\$ 3,606,385	\$ 3,509,490

City of Nashua  
Analysis of Capital Projects  
FY2013 through FY2019

Schedule B

Line No.	Description	Total Project Amount	Cash	Debt	Year of 1st Payment	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1	<b>Capital Expenditures</b>											
2												
3	<b>Consent Decree Control Plan Projects</b>											
4	<b>Major Mitigation Projects</b>											
5	Wet Weather Flow Treatment Facility	\$ 32,374,798	\$ 17,674,798	\$ 14,700,000	2010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Disinfection Facility	19,782,762	157,762	19,625,000	2017	-	7,880,000	11,820,643	-	-	-	-
7	Sluice Gate	874,841	874,841	-		-	-	-	-	-	-	-
8	Harbor Avenue	5,425,134	425,134	5,000,000	2014	1,928,998	-	-	-	-	-	-
9	Drop Over Structures	1,524,439	1,524,439	-		-	-	-	-	-	-	-
10	System Optimization	1,810,720	1,810,720	-		-	-	-	-	-	-	-
11	Storage Tank	6,000,455	235,491	5,764,964	2014	325,000	4,549,772	500,000	-	-	-	-
12	<b>Total Major Mitigation Projects</b>	<b>\$ 67,793,150</b>	<b>\$ 22,703,186</b>	<b>\$ 45,089,964</b>		<b>\$ 2,253,998</b>	<b>\$ 12,429,772</b>	<b>\$ 12,320,643</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
13												
14	<b>Other Consent Decree Projects</b>											
15	Consent Decree Operational Projects	\$ 1,172,306	\$ 1,172,306	\$ -		\$ 111,240	\$ 114,577	\$ 118,015	\$ 121,555	\$ 125,202	\$ 128,958	\$ 132,826
16	Inflow and Infiltration	500,000	500,000	-		500,000	-	-	-	-	-	-
17	<b>Total Other Consent Decree Projects</b>	<b>\$ 1,672,306</b>	<b>\$ 1,672,306</b>	<b>\$ -</b>		<b>\$ 611,240</b>	<b>\$ 114,577</b>	<b>\$ 118,015</b>	<b>\$ 121,555</b>	<b>\$ 125,202</b>	<b>\$ 128,958</b>	<b>\$ 132,826</b>
18												
19	<b>Total Consent Decree Control Plan Projects</b>	<b>\$ 69,465,456</b>	<b>\$ 24,375,492</b>	<b>\$ 45,089,964</b>								
20												
21	<b>Collection System and Other WWTF Projects</b>											
22	Infrastructure Improvements (Sewer Rehab)	\$ 12,995,631	\$ 12,995,631	\$ -		\$ 1,260,000	\$ 1,323,000	\$ 1,389,150	\$ 1,458,608	\$ 1,531,538	\$ 1,608,115	\$ 1,688,521
23	Sewer Structures	2,546,177	2,546,177	-		768,483	231,525	243,101	255,256	268,019	281,420	295,491
24	CSO Flooding	2,730,398	2,730,398	-		400,000	400,000	400,000	400,000	400,000	400,000	400,000
25	Haines Street	1,499,658	123,633	676,025	2011	-	-	-	-	-	-	-
26	Manchester Street (CSO Flooding)	100,000	100,000	-		-	-	-	-	-	-	-
27	Net Metering	495,807	2,831	248,638	2011	-	-	-	-	-	-	-
28	Aeration Blowers & Tank Upgrade	3,673,459	487,514	4,160,973	2014	3,483,410	-	-	-	-	-	-
29	Dewatering Equipment Replacement Project	5,566,516	0	5,566,516	2016	5,048,245	-	-	-	-	-	-
30	<b>Total Collection and Other WWTF Projects</b>	<b>\$ 29,607,644</b>	<b>\$ 18,005,492</b>	<b>\$ 10,652,152</b>		<b>\$ 10,960,138</b>	<b>\$ 1,954,525</b>	<b>\$ 2,032,251</b>	<b>\$ 2,113,864</b>	<b>\$ 2,199,557</b>	<b>\$ 2,289,535</b>	<b>\$ 2,384,012</b>
31												
32	Hazard Mitigation	\$ 50,593	\$ 50,593	\$ -		\$ 46,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	Stormwater Control	1,930,668	1,930,668	-		175,000	180,250	185,658	191,227	196,964	202,873	208,959
34	<b>Total Hazard Mitigation and Stormwater Control</b>	<b>\$ 1,981,261</b>	<b>\$ 1,981,261</b>	<b>\$ -</b>		<b>\$ 221,600</b>	<b>\$ 180,250</b>	<b>\$ 185,658</b>	<b>\$ 191,227</b>	<b>\$ 196,964</b>	<b>\$ 202,873</b>	<b>\$ 208,959</b>
35												
36	<b>Total Capital Improvement Projects</b>	<b>\$ 101,054,361</b>	<b>\$ 44,362,245</b>	<b>\$ 55,742,116</b>		<b>\$ 14,046,976</b>	<b>\$ 14,679,124</b>	<b>\$ 14,656,566</b>	<b>\$ 2,426,646</b>	<b>\$ 2,521,723</b>	<b>\$ 2,621,365</b>	<b>\$ 2,725,797</b>
37												
38	<b>Scheduled Equipment Replacements</b>	<b>\$ 11,175,000</b>	<b>\$ 9,537,000</b>	<b>\$ 1,638,000</b>		<b>\$ 2,278,000</b>	<b>\$ 1,628,000</b>	<b>\$ 2,558,000</b>	<b>\$ 556,000</b>	<b>\$ 1,132,000</b>	<b>\$ 532,000</b>	<b>\$ 853,000</b>
39												
40	<b>Combined Capital Expenditures</b>	<b>\$ 112,229,361</b>	<b>\$ 53,899,245</b>	<b>\$ 57,380,116</b>		<b>\$ 16,324,976</b>	<b>\$ 16,307,124</b>	<b>\$ 17,214,566</b>	<b>\$ 2,982,646</b>	<b>\$ 3,653,723</b>	<b>\$ 3,153,365</b>	<b>\$ 3,578,797</b>

City of Nashua  
Analysis of Capital Projects  
FY2013 through FY2019

Schedule C

Line No.	Description	Total Project Amount	Cash	Debt	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1	<b>Capital Funding Sources</b>										
2											
3	<b>Grants and Contributions</b>										
4	EPA Grant Funds - General	\$ 3,034,300			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	NH DES Grants for Wet Weather	-			-	-	-	-	-	-	-
6	NH DES Grants for N. Facilities	-			-	-	-	-	-	-	-
7	NH DES Grants for Disinfection	-			-	-	-	-	-	-	-
8	NH DES Grants for System Optimization	-			-	-	-	-	-	-	-
9	NH DES Grants Aeration Blowers	-			-	-	-	-	-	-	-
10	NH DES Grants for Storage Tanks	-			-	-	-	-	-	-	-
11	NH DES Grants Drop Over Structure	-			-	-	-	-	-	-	-
12	NH DES Grants Sluice Gate	-			-	-	-	-	-	-	-
13	NH DES Grants Harbor Avenue Sewer	-			-	-	-	-	-	-	-
14	NH DES Grants for I&I	-			-	-	-	-	-	-	-
15	NH DES Grants for CSO Flooding	-			-	-	-	-	-	-	-
16	NH DES Grants for Primary Clarifiers	-			-	-	-	-	-	-	-
17	NH DES Grants for Secondary Clarifiers	-			-	-	-	-	-	-	-
18	NH DES Grants for Dewatering	-			-	-	-	-	-	-	-
19	NH DES Grants for Prior Year Projects	3,408,574			163,953	141,747	137,545	132,540	127,533	122,526	122,526
20	Hudson Capital Contribution	1,489,382			113,490	386,917	313,086	-	-	-	-
21	<b>Total Grants and Contributions</b>	<b>\$ 7,932,256</b>			<b>\$ 277,443</b>	<b>\$ 528,664</b>	<b>\$ 450,631</b>	<b>\$ 132,540</b>	<b>\$ 127,533</b>	<b>\$ 122,526</b>	<b>\$ 122,526</b>
22											
23	<b>Capital Replacement Funds Used</b>										
24	Cash from Capital Replacement Fund for Projects Equipment (see Schedules D and E for detail)	\$ 826,000			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25		-			2,278,000	1,628,000	2,558,000	556,000	1,132,000	532,000	853,000
26	<b>Total Capital Replacement Funds Used</b>	<b>\$ 826,000</b>			<b>\$ 2,278,000</b>	<b>\$ 1,628,000</b>	<b>\$ 2,558,000</b>	<b>\$ 556,000</b>	<b>\$ 1,132,000</b>	<b>\$ 532,000</b>	<b>\$ 853,000</b>
27											
28	<b>Debt Proceeds (see Schedule F)</b>										
29	Wet Weather Flow Treatment Facility	\$ 32,374,798		\$ 14,700,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	Disinfection Facility	19,782,762		19,625,000	-	7,880,000	11,820,643	-	-	-	-
31	Harbor Avenue Sewer Separation	5,425,134		5,000,000	893,711	2,295,692	-	-	-	-	-
32	Storage Tanks (Bond R-11-167)	6,000,455		5,764,964	5,764,964	-	-	-	-	-	-
33	Haines Streets Sewer Separation (SRF & ARRA)	1,499,658		676,025	-	-	-	-	-	-	-
34	Net Metering (SRF & ARRA)	495,807		248,638	-	-	-	-	-	-	-
35	Aeration Blowers (Bond R-11-167)	3,673,459		4,160,973	4,160,973	-	-	-	-	-	-
36	Dewatering Project (Bond R-11-167)	5,566,516		5,566,516	3,199,063	2,367,453	-	-	-	-	-
37	Capital Equipment	1,638,000		1,638,000	-	-	1,638,000	-	-	-	-
38	<b>Total Debt Proceeds</b>	<b>\$ 76,456,589</b>		<b>\$ 57,380,116</b>	<b>\$ 14,018,711</b>	<b>\$ 12,543,145</b>	<b>\$ 13,458,643</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
39											
40	<b>Project Costs Funded by Available Cash</b>				<b>\$ (249,178)</b>	<b>\$ 1,607,315</b>	<b>\$ 747,292</b>	<b>\$ 2,294,106</b>	<b>\$ 2,394,190</b>	<b>\$ 2,498,839</b>	<b>\$ 2,603,271</b>

Schedule D - CAPITAL REPLACEMENT SCHEDULE							
NASHUA WASTEWATER FACILITY							
FISCAL YEAR 2013							
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Equipment or Structure	Equip. ID No:	Year Acquired	Total Installed Cost	Years Before Replace	Replacement Year	Future Replacement Cost	Annual Reserve Payment
PLANT CAPITAL EQUIPMENT FUND							
Roll-Off	ROF	2000	\$10,000	13	2013	15,000	1,000
WAS Thickener # 1	WAT 1	1989	\$95,000	24	2013	193,000	6,000
Anaerobic Digester Grinders (first half - several grinders)	ADG	2000	\$100,000	13	2013	147,000	9,700
Roll-Off	ROF	2000	\$10,000	13	2013	15,000	1,000
Screw Conveyors (bar screen)	SCR 1	2000	\$50,000	13	2013	73,000	4,800
Screenings Washer	SCW 1	2000	\$70,000	13	2013	103,000	6,800
Screenings Washer	SCW 2	2000	\$70,000	13	2013	103,000	6,800
Wet Well Odor Control Mechanical	WWOC	1992	\$100,000	21	2013	186,000	6,800
WAS Pumps # 1	WAS 1	1995	\$20,000	18	2013	34,000	1,500
WAS Thickener # 2	WAT 2	1989	\$95,000	24	2013	193,000	6,000
Underground Storage Tanks (1)	UST 1	2002	\$80,000	11	2013	111,000	8,900
Plant Air Compressor		1975	\$25,000	38	2013	77,000	1,200
Control Bldg 3 Ton Rail Crane		1975	\$25,000	38	2013	77,000	1,200
Hypochlorite Pump #1		1989	\$17,000	24	2013	35,000	1,100
Hypochlorite Pump #2		1989	\$17,000	24	2013	35,000	1,100
RAS Drive - Pump #1		1989	\$30,000	24	2013	61,000	1,900
WAS Polymer Pump (4 EA)		1989	\$12,000	24	2013	24,000	700

Schedule D - CAPITAL REPLACEMENT SCHEDULE							
NASHUA WASTEWATER FACILITY							
FISCAL YEAR 2013							
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
WAS Thickener # 3	WAT 3	1989	\$95,000	24	2013	193,000	6,000
Anaerobic Digester Grinders (second half - several grinders)	ADG	2000	\$100,000	13	2013	147,000	9,700
Primary Tanks Chain & flights # 5	PSD 5	2006	\$25,000	7	2013	31,000	4,100
Hypochlorite Pump #3		1989	\$17,000	24	2013	35,000	1,100
Hypochlorite Pump #4		1989	\$17,000	24	2013	35,000	1,100
RAS Drive - Pump #2		1989	\$30,000	24	2013	61,000	1,900
Blower Building Roof	BBR 1	1989	\$20,000	25	2014	42,000	1,200
Grit Chamber Roof	GCR	1989	\$15,000	25	2014	31,000	908
Raw Sewage Pump # 3+ Controls	RSP 3	1975	\$140,000	39	2014	443,000	6,800
Above ground diesel storage tanks (3)		1999	\$18,000	15	2014	28,000	1,600
Primary Tanks Chain & flights # 1	PSD 1	2007	\$25,000	7	2014	31,000	4,100
Primary Tanks Chain & flights # 2	PSD 2	2007	\$25,000	7	2014	31,000	4,100
Primary Tanks Chain & flights # 3	PSD 3	2007	\$25,000	7	2014	31,000	4,100
Primary Tanks Chain & flights # 4	PSD 4	2007	\$25,000	7	2014	31,000	4,100
RAS Drive - Pump #3		1989	\$30,000	25	2014	63,000	1,800
WAS Polymer Pump (3 EA)		1989	\$10,000	25	2014	21,000	600
Central Generator	CG1	1990	\$200,000	25	2015	419,000	12,300
Roof Administration Bldg	ADM 1	1995	\$45,000	20	2015	81,000	3,200
Aeration Tanks Grid System	ATC 1	1995	\$325,000	20	2015	587,000	23,000
Aeration Tanks Diffusers	ATD 1	2005	\$105,000	10	2015	141,000	12,600
Control Building Instrumental	CBI 1	2000	\$70,000	15	2015	109,000	6,100
Hypochlorite Chambers Mixers # 2	HCM 2	2008	\$12,000	7	2015	15,000	2,000
Primary Sludge Transfer Pumps	PST 1	1985	\$25,000	30	2015	61,000	1,400



	Schedule D - CAPITAL REPLACEMENT SCHEDULE						
	NASHUA WASTEWATER FACILITY						
	FISCAL YEAR 2013						
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Primary Sludge Transfer Pumps	PST 2	1985	\$25,000	30	2015	61,000	1,400
Primary Sludge Transfer Pumps	PST 3	1985	\$25,000	30	2015	61,000	1,400
RAS Pumps # 1	RAS 1	1988	\$80,000	27	2015	178,000	4,700
RAS Pumps # 2	RAS 2	1988	\$80,000	27	2015	178,000	4,700
RAS Pumps # 3	RAS 3	1988	\$80,000	27	2015	178,000	4,700
RAS Pumps # 4	RAS 4	1988	\$80,000	27	2015	178,000	4,700
Sludge Pumping Building Roof	SPR 1	1995	\$20,000	20	2015	36,000	1,400
WAS Pumps # 2	WAS 2	1995	\$20,000	20	2015	36,000	1,400
Water Meter Booster Station	WMB 1	1995	\$75,000	20	2015	135,000	5,300
Office AC Units - Rooftop	ACU 1	2000	\$35,000	15	2015	55,000	3,100
Anaerobic Digester Sludge Pumps	ADSP	2000	\$25,000	15	2015	39,000	2,200
Bar Screen - #1	MBS 1	2000	\$300,000	15	2015	467,000	26,000
Bar Screen - # 2	MBS 2	2000	\$300,000	15	2015	467,000	26,000
RAS Drive - Pump #4		1989	\$30,000	26	2015	65,000	1,800
Raw Sewage Pump # 4 + Controls	RSP 4	1975	\$140,000	41	2016	470,000	6,700
Boat	BOA	2001	\$5,500	15	2016	9,000	500
South Generator	SG1	1990	\$210,000	27	2017	466,000	12,300
Dechlor Building Roof	DBR 1	1991	\$15,000	26	2017	32,000	900
Hypochlorite Chambers Mixers # 1	HCM 1	2010	\$12,000	7	2017	15,000	2,000
Anerobic Digester Sludge Pumps	ADSP	2000	\$25,000	17	2017	41,000	2,000
Hypochlorite Storage Tank # 1	HCT 1	2007	\$75,000	10	2017	101,000	9,000
Primary Tank Odor Control Mechinical	PRI OD	2007	\$200,000	10	2017	269,000	24,000
Anaerobic Digester Vessel and Gas Holding Tank Evaluation	ADV	2000	\$50,000	18	2018	85,000	3,800

	Schedule D - CAPITAL REPLACEMENT SCHEDULE						
	NASHUA WASTEWATER FACILITY						
	FISCAL YEAR 2013						
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Influent Magmeter	IMM 1	2003	\$40,000	15	2018	62,000	3,500
Hypochlorite Storage Tank # 2	HCT 2	2008	\$75,000	10	2018	101,000	9,000
Dechlor Chemical Feed Pumps # 1	DCF 1	2008	\$17,000	10	2018	23,000	2,100
Dechlor Chemical Feed Pumps # 2	DCF 2	2008	\$17,000	10	2018	23,000	2,100
Dechlor Chemical Feed Pumps # 3	DCF 3	2008	\$17,000	10	2018	23,000	2,100
Roll-Off	ROF	2008	\$15,000	10	2018	20,000	1,800
Wet Weather Odor Control (Carbon Filter)	WWOC	2008	\$100,000	10	2018	134,000	12,000
Wet Weather Flow Meter	WWFM	2008	\$50,000	11	2019	69,000	5,500
Actiflo Mixers (4 EA)	AM	2009	\$50,000	10	2019	67,000	6,000
Actiflo Sand Pump (6 EA)	ASaP	2009	\$50,000	10	2019	67,000	6,000
Actiflo Sludge Pump (2 EA)	ASIP	2009	\$55,000	10	2019	74,000	6,600
Pump Bldg 3 Ton Rail Crane		1989	\$25,000	30	2019	61,000	1,400
RAS Piping from Pump #1, #2, #3, #4		1989	\$25,000	30	2019	61,000	1,400
WAS Piping from Pump #1, #2		1989	\$25,000	30	2019	61,000	1,400
WAS Piping from Thickener Pump #1		1989	\$10,000	30	2019	24,000	500
WAS Piping from Thickener Pump #2		1989	\$10,000	30	2019	24,000	500
WAS Piping from Thickener Pump #3		1989	\$10,000	30	2019	24,000	500
Wet Well(s) - Refurbish concrete		1989	\$40,000	30	2019	97,000	2,200
Dry Well(s) - Refurbish concrete		1989	\$25,000	30	2019	61,000	1,400
Process Tanks Slide Gate Operator	PSI 1	1995	\$85,000	25	2020	178,000	5,200
Anaerobic Digester Generator (Wakashau Generator)	ADGen	2000	\$450,000	20	2020	813,000	31,800
Anaerobic Digester Iron Sponge	ADIS	2000	\$10,000	20	2020	18,000	700
Anerobic Digester Vessel Upgrade	ADV	2000	\$250,000	20	2020	452,000	17,700

	Schedule D - CAPITAL REPLACEMENT SCHEDULE						
	NASHUA WASTEWATER FACILITY						
		FISCAL YEAR 2013					
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Gas Holding Tank Vessel & Equip Upgrade		2000	\$200,000	20	2,020	361,000	14,100
Digester Complex HVAC		2001	\$30,000	20	2021	54,000	2,100
Digester Complex Instrumentation		2001	\$25,000	20	2021	45,000	1,800
Digester Heat Exchanger (H. E. Sargent, Inc.)		2011	\$54,000	11	2022	75,000	6,000
Boilers	BO11	2002	\$100,000	20	2022	181,000	7,100
Car 3	CAR 3	2011	\$27,000	12	2023	38,000	2,800
Car 155	CAR155	2013	\$35,000	10	2023	47,000	4,200
Wet Weather Pump #1	WWP 1	2008	\$75,000	15	2023	117,000	6,500
Wet Weather Pump #2	WWP 2	2008	\$75,000	15	2023	117,000	6,500
Wet Weather Pump #3	WWP 3	2008	\$75,000	15	2023	117,000	6,500
Wet Weather Pump #4	WWP 4	2008	\$75,000	15	2023	117,000	6,500
Wet Weather Screening Conveyor	WWSC	2008	\$75,000	15	2023	117,000	6,500
Wet Weather Bar Rack #2	WWBR	2009	\$300,000	15	2024	467,000	26,000
Emergency Generator North Facilities	GEN 1	2009	\$275,000	15	2024	428,000	23,900
Primary Clarifier Drive 1	PTD1	2005	\$30,000	20	2025	54,000	2,100
Primary Clarifier Drive 2	PTD2	2005	\$30,000	20	2025	54,000	2,100
Anaerobic Digester Boiler #1	ADB 1	2000	\$100,000	25	2025	209,000	6,100
Anaerobic Digester Boiler #2	ADB 2	2000	\$100,000	25	2025	209,000	6,100
Main Gate Influent Gate Operator	IGO 1	2005	\$100,000	20	2025	181,000	7,100
Primary Tanks Coating #1	PSC 1	2007	\$45,000	20	2027	81,000	3,200
Primary Tanks Coating #2	PSC 2	2007	\$45,000	20	2027	81,000	3,200
Primary Tanks Coating #3	PSC 3	2007	\$45,000	20	2027	81,000	3,200
Primary Tanks Coating #4	PSC 4	2007	\$45,000	20	2027	81,000	3,200

Schedule D - CAPITAL REPLACEMENT SCHEDULE							
NASHUA WASTEWATER FACILITY							
FISCAL YEAR 2013							
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Primary Tanks Coating #5	PSC 5	2007	\$45,000	20	2027	81,000	3,200
Aeration Basin/Secondary Clarifier Structural Rehab		2013	\$500,000	15	2028	779,000	43,442
Aeration Basin/Secondary Clarifier Structural Rehab		2013	\$800,000	15	2028	1,246,000	69,485
Wet Weather Bar Rack #1	WWBR	2008	\$300,000	20	2028	542,000	21,200
Wet Weather PS Roof	WWR	2008	\$20,000	20	2028	36,000	1,400
Plant Water System	PWS 1	2009	\$120,000	20	2029	217,000	8,500
Actiflo Roof	AR	2009	\$20,000	20	2029	36,000	1,400
Actiflo Tanks	AT	2009	\$150,000	20	2029	271,000	10,600
Dry Polymer Feeder #1		2009	\$30,000	20	2,029	54,000	2,100
Polymer Run Tank #1		2009	\$30,000	20	2029	54,000	2,100
Polymer Make up Tank #1		2009	\$30,000	20	2029	54,000	2,100
Dry Polymer Feeder #2		2009	\$30,000	20	2029	54,000	2,100
Polymer Run Tank #2		2009	\$30,000	20	2029	54,000	2,100
Polymer Make up Tank #2		2009	\$30,000	20	2029	54,000	2,100
Sand Feeder		2009	\$104,000	20	2029	188,000	7,400
Actiflo Cyclone #1		2009	\$35,000	20	2029	63,000	2,500
Actiflo Cyclone #2		2009	\$35,000	20	2029	63,000	2,500
Actiflo Cyclone #3		2009	\$35,000	20	2029	63,000	2,500
Actiflo Cyclone #4		2009	\$35,000	20	2029	63,000	2,500
Actiflo Cyclone #5		2009	\$35,000	20	2029	63,000	2,500
Actiflo Cyclone #6		2009	\$35,000	20	2029	63,000	2,500
Actiflo Sludge Thickener Tank		2009	\$520,000	20	2029	939,000	36,800
Actiflow Flocculation Tank		2009	\$188,000	20	2029	340,000	13,300



	Schedule D - CAPITAL REPLACEMENT SCHEDULE						
	NASHUA WASTEWATER FACILITY						
	FISCAL YEAR 2013						
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Actiflow Clarifier #1		2009	\$300,000	20	2029	542,000	21,200
Actiflow Clarifier #2		2009	\$300,000	20	2029	542,000	21,200
Actiflow Mixing Tank #1		2009	\$318,000	20	2029	574,000	22,500
Actiflow Mixing Tank #2		2009	\$318,000	20	2029	574,000	22,500
Skid #1 Polymer Pump #1, #2, #3		2009	\$30,000	20	2029	54,000	2,100
Skid #2 Polymer Pump #1, #2, #3		2009	\$30,000	20	2029	54,000	2,100
Skid #3 Polymer Pump #1, #2, #3		2009	\$30,000	20	2029	54,000	2,100
Grease Transfer Pump (Bourgen pump)		2010	\$10,000	20	2030	18,000	700
Net Metering Equipment & Transformer		2011	\$150,000	20	2031	271,000	10,600
Sluice Gate		2011	\$700,000	20	2031	1,264,000	49,500
Primary Tanks Sludge Storage Drive # 1	PSA 1	2012	\$55,000	20	2032	99,000	3,900
Primary Tanks Sludge Storage Drive # 2	PSA 2	2012	\$55,000	20	2032	99,000	3,900
Raw Sewage Pump # 1+ Controls (Alice Changers pump)	RSP 1	2012	\$90,000	20	2032	163,000	6,400
Hypochlorite Pump #5		2009	\$17,000	23	2032	34,000	1,100
Hypochlorite Pump #6		2009	\$17,000	23	2032	34,000	1,100
Blower Bldg Wall Rehab		2013	\$220,000	20	2033	397,000	15,541
Aeration Blower Replacement (3 Units)		2013	\$1,200,000	20	2033	2,167,000	84,832
Instrumentation		2013	\$200,000	20	2033	361,000	14,132
Grit Chamber HVAC	GCHV	2013	\$100,000	20	2033	181,000	7,086
Grit Chamber Grit Classifier # 1	GCC 1	2013	\$100,000	20	2033	181,000	7,086
Grit Chamber Grit Classifier # 2	GCC 2	2013	\$100,000	20	2033	181,000	7,086
Grit Chamber Electrical	GCE	2013	\$140,000	20	2033	253,000	9,904
Grit Chamber Instrumentation	GCI	2013	\$60,000	20	2033	108,000	4,228

	Schedule D - CAPITAL REPLACEMENT SCHEDULE						
	NASHUA WASTEWATER FACILITY						
	FISCAL YEAR 2013						
Assumptions:							
Savings Interest Inflation Rates Compounded Annually						Savings Rate:	2.5%
Future Value is the Inflation Factor						Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
Grit Chamber Piping	GCP	2013	\$50,000	20	2033	90,000	3,523
Grit Pump # 1	GCP 1	2013	\$25,000	20	2033	45,000	1,762
Grit Pump # 2	GCP 2	2013	\$25,000	20	2033	45,000	1,762
Grit Chamber Cyclo Blower # 1	GCB 1	2013	\$25,000	20	2033	45,000	1,800
Grit Chamber Cyclo Blower # 2	GCB 2	2013	\$25,000	20	2033	45,000	1,800
Grit System Slide Gate		2013	\$50,000	20	2033	90,000	3,500
Sludge Processing Mechanical Piping # 1	SPP 1	2013	\$700,000	20	2033	1,264,000	49,482
Belt Press Conveyors	BPC	2013	\$150,000	20	2033	271,000	10,609
Sludge Processing Electrical	SPE 1	2013	\$200,000	20	2033	361,000	14,132
Sludge Processing Instrumentation	SPI 1	2013	\$150,000	20	2033	271,000	10,609
Sludge Processing Mechanical Piping # 2	SPP 2	2013	\$700,000	20	2033	1,264,000	49,482
Sludge Processing Mechanical Piping # 3	SPP 3	2013	\$700,000	20	2033	1,264,000	49,482
Press Polymer Pump (4 EA)		2013	\$125,000	20	2033	226,000	8,847
Sludge Pumping Building Scum Ejector # 1	SPE 1	2013	\$150,000	20	2033	271,000	10,609
Sludge Pumping Building Scum Ejector # 2	SPE 2	2013	\$150,000	20	2033	271,000	10,609
Sludge Processing Building Odor System	SPO 1	2013	\$50,000	20	2033	90,000	3,523
Raw Sewage Pump # 2+ Controls	RSP 2	2013	\$90,000	20	2033	163,000	6,400
Roll Off Truck # 111		2013	\$177,000	23	2036	349,000	11,400
Grit Chamber Screw Conveyor # 1	GCS 1	2013	\$50,000	23	2036	99,000	3,237
Grit Chamber Screw Conveyor # 2	GCS 2	2013	\$50,000	23	2036	99,000	3,237
Secondary Clarifier Drive Rehab (1 Units)		2013	\$80,000	24	2037	163,000	5,039
Electrical		2013	\$300,000	24	2037	610,000	18,857
TOTALS PLANT CEF			\$19,264,000			\$34,598,000	\$1,453,329

<b>Schedule D - CAPITAL REPLACEMENT SCHEDULE</b>							
<b>NASHUA WASTEWATER FACILITY</b>							
<b>FISCAL YEAR 2013</b>							
<b>Assumptions:</b>							
Savings Interest Inflation Rates Compounded Annually						<b>Savings Rate:</b>	2.5%
Future Value is the Inflation Factor						<b>Inflation Rate:</b>	3.0%
Annual Reserve Payment is Discounted by Savings Rate							
<b>COLLECTION SYSTEM CAPITAL EQUIPMENT FUND</b>							
Vacuum Truck 87	VAC87	2000	\$200,000	13	2013	294,000	19,400
Fulton Street PS	FPS	1995	\$180,000	19	2014	316,000	13,200
Pump Station Pumps (4)	PSP	1995	\$70,000	19	2014	123,000	5,100
Spaulding Street PS	SPS	1995	\$180,000	19	2014	316,000	13,200
Pump Station Pumps (3)	PSP	1995	\$60,000	19	2014	105,000	4,400
Truck 62 - '04 Chevy 2WD- Plant		2004	\$12,000	10	2014	16,000	1,400
Truck 86 - '05 Ford		2004	\$12,000	11	2015	17,000	1,400
National Street PS (Sandy Pond)	NPS	1995	\$350,000	20	2015	632,000	24,700
Truck 136 - 1/2 Ton Chevy w/crane		2004	\$20,000	12	2016	29,000	2,100
Truck 135 - 3/4 Ton Chevy		2004	\$15,000	12	2016	21,000	1,500
Truck 176- Ford F350		2004	\$19,000	12	2016	27,000	2,000
Collection Truck 82 (1 Ton w/ Crane)		2004	\$25,000	13	2017	37,000	2,400
TV Video Truck 112	TVT 1	2002	\$110,000	15	2017	171,000	9,500
Truck 4 - CB Cleaner w/ Clamshell Bucket		2004	\$40,000	14	2018	61,000	3,700
Kubota Tractor		2004	\$15,000	15	2019	23,000	1,300
Street Sweeper		2004	\$90,000	15	2019	140,000	7,800
Vacuum Truck 171	VST 171	2005	\$200,000	15	2020	312,000	17,400
Portable Generator (big one)		2000	\$20,000	20	2020	36,000	1,400
Watson Street PS	WPS	1995	\$350,000	25	2020	733,000	21,500
6" Dewatering Pump (Flood Relief)		2004	\$5,000	20	2024	9,000	400
<b>TOTAL COLLECTION SYSTEM CEF</b>			<b>\$680,000</b>			<b>\$1,253,000</b>	<b>\$153,800</b>

	Schedule D - CAPITAL REPLACEMENT SCHEDULE							
	NASHUA WASTEWATER FACILITY							
		FISCAL YEAR 2013						
Assumptions:								
Savings Interest Inflation Rates Compounded Annually							Savings Rate:	2.5%
Future Value is the Inflation Factor							Inflation Rate:	3.0%
Annual Reserve Payment is Discounted by Savings Rate								
TOTAL CEF			\$19,944,000			\$35,851,000	\$1,607,129	



## Schedule E - New Project Debt Service

### Disinfection Facility

Debt Type: SRF  
 Debt Origination: 2012  
 First Payment Year: 2016  
 Cost: 19,782,762  
 Debt Amount: 19,625,000  
 Term (in years): 20  
 Interest Rate: 3.104%

Year	Principal	Interest	Total
Totals	19,625,000	6,396,180	26,021,180
2012	-	-	-
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	981,250	609,160	1,590,410
2017	981,250	578,702	1,559,952
2018	981,250	548,244	1,529,494
2019	981,250	517,786	1,499,036
2020	981,250	487,328	1,468,578
2021	981,250	456,870	1,438,120
2022	981,250	426,412	1,407,662
2023	981,250	395,954	1,377,204
2024	981,250	365,496	1,346,746
2025	981,250	335,038	1,316,288
2026	981,250	304,580	1,285,830
2027	981,250	274,122	1,255,372
2028	981,250	243,664	1,224,914
2029	981,250	213,206	1,194,456
2030	981,250	182,748	1,163,998
2031	981,250	152,290	1,133,540
2032	981,250	121,832	1,103,082
2033	981,250	91,374	1,072,624
2034	981,250	60,916	1,042,166
2035	981,250	30,458	1,011,708

### Dewatering Equipment Replacement

Debt Type: Bond  
 Debt Origination: 2013  
 First Payment Year: 2014  
 Cost: 5,566,516  
 Debt Amount: 5,566,516  
 Term (in years): 20  
 Interest Rate: 2.864%

Year	Principal	Interest	Total
Totals	5,566,516	1,673,963	7,240,479
2013	-	-	-
2014	278,326	159,425	437,751
2015	278,326	151,454	429,780
2016	278,326	143,483	421,808
2017	278,326	135,511	413,837
2018	278,326	127,540	405,866
2019	278,326	119,569	397,895
2020	278,326	111,598	389,923
2021	278,326	103,626	381,952
2022	278,326	95,655	373,981
2023	278,326	87,684	366,010
2024	278,326	79,713	358,038
2025	278,326	71,741	350,067
2026	278,326	63,770	342,096
2027	278,326	55,799	334,125
2028	278,326	47,828	326,153
2029	278,326	39,856	318,182
2030	278,326	31,885	310,211
2031	278,326	23,914	302,240
2032	278,326	15,943	294,268
2033	278,326	7,971	286,297

### Storage Tank

Debt Type: Bond  
 Debt Origination: 2013  
 First Payment Year: 2014  
 Cost: 5,764,964  
 Debt Amount: 5,764,964  
 Term (in years): 20  
 Interest Rate: 2.864%

Year	Principal	Interest	Total
Totals	5,764,964	1,733,640	7,498,604
2013	-	-	-
2014	288,248	165,109	453,357
2015	288,248	156,853	445,101
2016	288,248	148,598	436,846
2017	288,248	140,342	428,590
2018	288,248	132,087	420,335
2019	288,248	123,831	412,080
2020	288,248	115,576	403,824
2021	288,248	107,321	395,569
2022	288,248	99,065	387,313
2023	288,248	90,810	379,058
2024	288,248	82,554	370,802
2025	288,248	74,299	362,547
2026	288,248	66,043	354,292
2027	288,248	57,788	346,036
2028	288,248	49,533	337,781
2029	288,248	41,277	329,525
2030	288,248	33,022	321,270
2031	288,248	24,766	313,014
2032	288,248	16,511	304,759
2033	288,248	8,255	296,504

**Haines Street**

Debt Type: SRF  
 Debt Origination: 2010  
 First Payment Year: 2012  
 Cost: 1,499,658  
 Debt Amount: 676,025  
 Term (in years): 10  
 Interest Rate: 1.845%

Year	Principal	Interest	Total
Totals	676,025	68,600	744,625
2010	-	-	-
2011	-	-	-
2012	67,603	12,473	80,075
2013	67,603	11,225	78,828
2014	67,603	9,978	77,581
2015	67,603	8,731	76,333
2016	67,603	7,484	75,086
2017	67,603	6,236	73,839
2018	67,603	4,989	72,592
2019	67,603	3,742	71,344
2020	67,603	2,495	70,097
2021	67,603	1,247	68,850

**Net Metering**

Debt Type: SRF  
 Debt Origination: 2010  
 First Payment Year: 2012  
 Cost: 495,807  
 Debt Amount: 248,638  
 Term (in years): 10  
 Interest Rate: 1.845%

Year	Principal	Interest	Total
Totals	248,638	25,231	273,868
2010	-	-	-
2011	-	-	-
2012	24,864	4,587	29,451
2013	24,864	4,129	28,992
2014	24,864	3,670	28,534
2015	24,864	3,211	28,075
2016	24,864	2,752	27,616
2017	24,864	2,294	27,157
2018	24,864	1,835	26,699
2019	24,864	1,376	26,240
2020	24,864	917	25,781
2021	24,864	459	25,323

**Harbor Ave - Disinfect. Facility Proj**

Debt Type: SRF  
 Debt Origination: 2011  
 First Payment Year: 2014  
 Cost: 5,425,134  
 Debt Amount: 5,000,000  
 Term (in years): 20  
 Interest Rate: 2.864%

Year	Principal	Interest	Total
Totals	4,750,000	1,360,400	6,110,400
2011	-	-	-
2012	-	-	-
2013	-	-	-
2014	250,000	136,040	386,040
2015	250,000	128,880	378,880
2016	250,000	121,720	371,720
2017	250,000	114,560	364,560
2018	250,000	107,400	357,400
2019	250,000	100,240	350,240
2020	250,000	93,080	343,080
2021	250,000	85,920	335,920
2022	250,000	78,760	328,760
2023	250,000	71,600	321,600
2024	250,000	64,440	314,440
2025	250,000	57,280	307,280
2026	250,000	50,120	300,120
2027	250,000	42,960	292,960
2028	250,000	35,800	285,800
2029	250,000	28,640	278,640
2030	250,000	21,480	271,480
2031	250,000	14,320	264,320
2032	250,000	7,160	257,160

#### Aeration Blowers

Debt Type: Bond  
 Debt Origination: 2013  
 First Payment Y: 2014  
 Cost: 3,673,459  
 Debt Amount: 4,160,973  
 Term (in years): 20  
 Interest Rate: 2.864%

Year	Principal	Interest	Total
Totals	4,160,973	1,251,288	5,412,261
2013	-	-	-
2014	208,049	119,170	327,219
2015	208,049	113,212	321,260
2016	208,049	107,253	315,302
2017	208,049	101,295	309,343
2018	208,049	95,336	303,385
2019	208,049	89,378	297,426
2020	208,049	83,419	291,468
2021	208,049	77,461	285,509
2022	208,049	71,502	279,551
2023	208,049	65,544	273,592
2024	208,049	59,585	267,634
2025	208,049	53,627	261,675
2026	208,049	47,668	255,717
2027	208,049	41,710	249,758
2028	208,049	35,751	243,800
2029	208,049	29,793	237,841
2030	208,049	23,834	231,883
2031	208,049	17,876	225,924
2032	208,049	11,917	219,966
2033	208,049	5,959	214,007

#### Capital Equipment

Debt Type: Bond  
 Debt Origination: 2015  
 First Payment Y: 2016  
 Cost: 1,638,000  
 Debt Amount: 1,638,000  
 Term (in years): 20  
 Interest Rate: 2.864%

Year	Principal	Interest	Total
Totals	1,638,000	492,579	2,130,579
2015	-	-	-
2016	81,900	46,912	128,812
2017	81,900	44,567	126,467
2018	81,900	42,221	124,121
2019	81,900	39,875	121,775
2020	81,900	37,530	119,430
2021	81,900	35,184	117,084
2022	81,900	32,839	114,739
2023	81,900	30,493	112,393
2024	81,900	28,147	110,047
2025	81,900	25,802	107,702
2026	81,900	23,456	105,356
2027	81,900	21,111	103,011
2028	81,900	18,765	100,665
2029	81,900	16,419	98,319
2030	81,900	14,074	95,974
2031	81,900	11,728	93,628
2032	81,900	9,382	91,282
2033	81,900	7,037	88,937
2034	81,900	4,691	86,591
2035	81,900	2,346	84,246

**Existing Debt Service Schedule**

<b>Description</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
Existing Debt	\$ 1,327,515	\$ 1,091,523	\$ 1,052,322	\$ 765,501	\$ 641,735	\$ 620,377	\$ 584,817	\$ 564,226	\$ 543,634	\$ 523,043
Accrued Interest	\$ 125,516									
Wet Weather SRF		\$ 1,189,361	\$ 1,147,247	\$ 1,125,550	\$ 1,103,852	\$ 1,082,155	\$ 1,060,459	\$ 1,038,761	\$ 1,017,064	\$ 995,366
<b>Total - Existing Debt</b>	<b>\$ 1,453,031</b>	<b>\$ 2,280,884</b>	<b>\$ 2,199,569</b>	<b>\$ 1,891,051</b>	<b>\$ 1,745,587</b>	<b>\$ 1,702,532</b>	<b>\$ 1,645,276</b>	<b>\$ 1,602,987</b>	<b>\$ 1,560,698</b>	<b>\$ 1,518,409</b>